BRUHAT BENGALURU MAHANAGARA PALIKE

TENDER DOCUMENT – KW4

(WORKS COSTING MORE THAN Rs. 100 LAKHS)

Name of Work: - Repairs and Improvement to Roads Mandi Mariyappa Reddy main road in Mariyannapalya inward No.07 Byatarayanapura

Contents

Section	Description	Page No.
5.	CONDITIONS OF CONTRACT (CC)	03
6.	CONTRACT DATA	16
7.	SPECIFICATIONS	22
8.	DRAWINGS	22
9.	BILL OF QUANTITIES	23

SECTION 5: CONDITIONS OF CONTRACT

Table of Contents

		Page No.
A.	**General**	04
	1. Definitions	04
	2. Interpretation	05
	3. Law governing contract	05
	4. Employers decisions	05
	5. Delegation	05
	6. Communications	05
	7. Subcontracting	05
	8. Other Contractors	05
	9. Personnel	05
	10. Employer's and Contractor's risks	05
	11. Employer's risks	06
	12 Contractor's risks	06
	13. Insurance	06
	14. Site Investigation Report	06
	15 Query about Contract Data	06
	16 Contractor to construct the Works	07
	17. The Works to be completed by Intended Completion Date	07
	18 Approvals by the Employer	07
	19. Safety	07
	20. Discoveries	07
	21. Possession of the Site	07
	22. Access to the Site	07
	23. Instructions	07
	24. Procedure for resolution of disputes	
B.	**Time Control**	
	25. Program	08
	26. Extension of the Intended Completion Date	08
	27. Delays ordered by the Employer	08
	28. Management meetings	08
C.	**Quality Control**	
	29. Identifying defects	08
	30. Tests	08
	31. Correction of defects	08
	32. Uncorrected defects	09
D.	**Cost Control**	
	33 Bill of Quantities (BOQ)	09
	34 Variations	09
	35. Payment for Variations	09
	36. Submission of bills for payment	10
	37 Payments	10
	38. Compensation events	10
	39. Tax	10
	40 Price Adjustment	11
	41. Liquidated damages	11
	42. Advance Payments	11
	43. Securities	11
	44. Cost of repairs	11
E	**Finishing of Contract**	
	45. Completion	11
	46. Taking Over	11
	47. Final account	11
	48. As built drawings and/or Operating and Maintenance Manuals	12
	49. Termination	12
	50 Payment upon termination	12
	51. Property	13
	52. Release from performance	13
F	**Special Conditions of Contract**	13

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.
Compensation events are those defined in Clause 38 hereunder.
The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.
The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.
The **Contract Data** defines the documents and other information which comprise the Contract.
The **Contractor** is a person or corporate body who's Tender to carry out the Works has been accepted by the Employer.
The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.
The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
Days are calendar days; **months** are calendar months.
A **Defect** is any part of the Works not completed in accordance with the Contract.
The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.
The **Employer** is the party who will employ the Contractor to carry out the Works.
Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.
The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.
Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.
Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.
The **Site** is the area defined as such in the Contract Data.
Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Employer.
The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.
A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.
A **Variation** is an instruction given by the Employer which varies the Works.
The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

2.2 The documents forming the Contract shall be interpreted in the following order of priority:

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010
CONTRACTOR

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

(1) Agreement
(2) Letter of Acceptance, notice to proceed with the works
(3) Contractor's Tender
(4) Contract Data
(5) Conditions of Contract
(6) Specifications
(7) Drawings
(8) Bill of quantities and
(9) any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor.

5. Delegation

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting (Deleted)

7.1 Deleted.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.

9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's risks

11.1 The Employer is responsible for the excepted risks which are:
(a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or
(b) a cause due solely to the design of the Works, other than the Contractor's design; or

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

(c)any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:

(i) could not have reasonably foreseen; or

(ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;

(A) prevent loss or damage to physical property from occurring by taking appropriate measures or

(B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

13.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances , in the joint names of the Employer and the Contractor, (cover from the first working day after the Start Date to the end of Defects Liability Period), in the amounts stated in the Contract Data :

(a) for loss of or damage to the Works, Plants and Materials and the Contractor's equipment;

(b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and

(c) for liability of both Parties and of any Employer's representative for death and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payments is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
ENGALURU-560 010

CONTRACTOR

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.

24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.

24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

CONTRACTOR

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

B. Time Control

25. Program

25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

31. Correction of defects

31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

32. **Uncorrected defects**

32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

COST CONTROL

33. **Bill of Quantities (BOQ)**

33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

34. **Variations**

34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

(a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
(b) Omit any item of work;
(c) Change the character or quality or kind of any item of work;
(d) Change the levels, lines, positions and dimensions of any part of the work;
(e) Execute additional items of work of any kind necessary for the completion of the works; and
(f) Change in any specified sequence, methods or timing of construction of any part of the work.

34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.

34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.

34.4 The Contractor shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation if any. Further, approval of Govt. / BBMP has to be obtained for the variation exceeding 5%.

35. **Payments for Variations**

35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.

35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.

35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract

35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.

35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.

36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

37.1 Payments shall be adjusted for deductions for advance payments other than recoveries in terms of contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The contractor shall be liable to pay liquidated damages for shortfall in progress. For progress beyond the agreed programme payment is subject to availability of the grants.

37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

38.1 The following are Compensation events unless they are caused by the Contractor:

(a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
(b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
(c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
(d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
(e) The effect on the Contractor of any of the Employer's Risks.
(f) The Employer unreasonably delays issuing a Certificate of Completion.
(g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be deemed to be exclusive of GST and inclusive of other taxes that the Contractor will have to be paid for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment:
GO-1 (As per the G.O. No.FD 3 PCL 2008, Bangalore, Dated: 21.11.2008)

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

If the period of execution is more than 6 months but less than or equal to 12 months for work costing more than Rs.50 lakhs, star rates in respect of specified materials (cement, steel and bitumen) only shall be payable to the contractor based on the all India average wholesale price index for the said materials. The star rates adjustment shall be as per the increase or decrease in the index as applied to the said materials between the last date for receiving bids and the date of execution as per the approved programme of works submitted by the contractor at the time of execution of agreement which shall mandatorily be a part of the agreement.

Government order-02.GO.N.791 Exp-12/2015.dated.26.02.2016 Bangalore – Provision for price adjustment for specified materials for works – is under clarification as per Government order action taken.

40.1 Contract price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formulae given in the Contract Data.[1]

(a) The price Adjustment shall apply for the work done from the date of commencement up to the end of original period of completion or extensions granted by the Employer and shall not apply to work carried out beyond the stipulated period of completion for reasons attributable to the Contractor;
(b) Price Adjustment shall be admissible from the date of opening of tenders (original or extended)
(c) The price adjustment shall be determined during each quarter from the formulae given in Contract Data.
(d) Following expressions and meanings are assigned to the work done during the quarter:

R = Total value of work done during the quarter. It will exclude value for works executed under variations for which price adjustment (if any) will be worked out separately based on the terms mutually agreed.

40.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments: Refer Section 6: Contract Data

43. Securities:

43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

45. Completion

45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

---

[1] Refer GOK Order No.FD 59 Pro.Cell 2004, Bangalore Dated 26th November 2004

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

46. Taking over

46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

48. As built drawings and /or Operating and Maintenance Manuals

48.1 If "as built" (*Completion drawings*) Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

(a) The Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;

(b) Deleted.

(c) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) Deleted.

(e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;

(f) The Contractor does not maintain a security which is required;

(g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and

(h) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
For the purpose of this paragraph : "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.

49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. Property

51.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

52. Release from performance

52.1 If the Contract is frustrated by any event entirely outside the control of either the Employer or the Contractor the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made

F. Special Conditions of Contract

1. Labour:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations:

During continuance of the contract, the Contractor shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor in no case shall be treated as the employees of the Employer at any point of time

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

3. **Protection of Environment:**

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. **Arbitration (Clause 24)**

4.1 The procedure for arbitration shall be as follows:

(a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)

(b) Arbitration proceedings shall be held at....., Karnataka state (to be filled in by the Employer before issue of the Tender Documents),

(c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.

5. In the case of the death of a Contractor after executing the agreement / commencement of the work, his legal heir, if an eligible registered Contractor and willing can execute and complete the work at the accepted tender rates irrespective of the cost of the work.

6. The Contractor should produce invoice for procurement of Bitumen, Steel, HDPE ducts, Geo-textile material along with bills. No payments will be made without such invoices.

7. Mix Designs for Concrete and Asphalt work should be got approved by Chief Engineer before commencement of Work.

8. 63/51 mm Double Walled Corrugated HDPE Duct should have the inner layer as silicore marking the duct manufacturer and also size of the duct. The Duct should conform to ISO Certification and the colour of duct should be orange or blue for better identity.

9. The Contractor shall provide One four wheeler along with driver, fuel expenses to Project Engineers in-charge of work to facilitate and co-ordinate the supervision of the work.

10. The Contractor shall establish field lab and field office to facilitate quality assurance of execution of works.

11. The hot mix plant unit should be within the radius of 40km from Vidhanasoudha, Bangalore

12. The availability of hot mix plant and ownership will be ascertained by physical inspection at the time of technical evaluation by the evaluation authority

13. GST Shall be Paid to the Tendered Amount Separately

14. Tenderer should have Registered with EPF and ESI authorities: Certification should be produced at the time of Tendering OR else being entering into the Agreement.

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

Annexure:

LIST OF ORGANIZATIONS WHO ARE CONSIDERED AS APPOINTING AUTHORITY FOR APPOINTMENT OF ARBITRATORS[2]

1. Indian Council of Arbitration, New Delhi;
2. International Centre for Alternative Disputes Resolution (India);
3. Indian Roads Congress;
4. Indian Building Congress;
5. Indian Institute of Bridge Engineers;
6. Indian Institute of Public Health Engineers;
7. Institute of Water Works

[2] Add any other Organization considered suitable.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

SECTION 6: CONTRACT DATA

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract: **Clause Reference**

- The Schedule of Operating and Maintenance Manuals [48]
- The Methodology and Program of Construction [25]
- Site Investigation Reports [14]
- The Schedule of Key and Critical Equipment to be deployed on the work as per agreed program of construction. [25]

The Employer is: [1.1]

Name: The Commissioner
Address: BBMP, N.R. Square Bangalore-02
Name of authorized Representative: Executive Engineer
Road Infrastructure –Yelahanka Division
Bruhat Bangalore Mahanagara Palike

The name and identification number of the Contract is [1.1]

Repairs and Improvement to Roads Mandi Mariyappa Reddy main road in Mariyannapalya inward No.07 Byatarayanapura

The Works consist of Formation of Roads & Asphalting

The start date shall be the date of issue of notice to proceed with the work. [1.1]

The Intended Completion Date for the whole of the Works is **6 months**[3] with the following milestones [17, 26]

Milestone dates:
Physical works to be completed Period from the date of issue of Notice to proceed with the work

Milestone 1 i.e Financial Progress for Rs.66.00 lakhs within 02 Months from the date of work order
Milestone 2 i.e Financial Progress for Rs.132.00 lakhs within 04 Months from the date of work order
Milestone 3 i.e Financial Progress for Rs. 196.77 lakhs within 06 Months from the date of work order

The Site Possession Date is:[4] **Date of work order** [21]

The Site is located at **Yelahanka Zone** [1.1]
and is defined in drawings

The Defects Liability Period is **1 Years**

Insurance requirements are as under: [13]

---

[3] At the time of preparation of the tender document give the period required for completion of whole work and the milestones. When the Agreement is drawn after award of contract the dates can be put in.
[4] At the time of preparation of the tender document give the period after the issue of work order when the site would be made available to the contractor, for example 'one week after the issue of work order'.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

	Type of Cover	Minimum cover for Insurance[5]
(i)	Works of Plant and materials	The sum stated in the Agreement plus 20%
(ii)	Loss or damage to equipment	Full replacement cost
(iii)	Loss or damage to property of Third Party	Full replacement cost
(iv)	Personal injury or death insurance (a) for Third Party[6]	
	(b) for Contractor's employees or labour	In accordance with the statutory requirements applicable to Karnataka

Price Adjustment Formula;[7] [40]

R= Value of work as defined in Clause 40.1 of Conditions of Contract.

Adjustment for labour component:

(i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$V_L = 0.85 \times P_L /100 \times R \times (L_i - L_o) / L_o$ Where,

V_L = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour;

L_o = The average consumer price index[8] for industrial workers for Bangalore Centre for the quarter preceding the date of opening of tenders as published by the Labour Bureau, Ministry of Labour, Government of India;

L_i = The average consumer price index for industrial workers for Bangalore Centre for the quarter under consideration as published by Labour Bureau, Ministry of Labour, Government of India

P_L = Percentage of labour component of the work

Adjustment for Cement Component:

(ii) Price adjustment for increase or decrease in the cost of cement component procured by the contractor shall be paid in accordance with the following formula.

$$V_C = 0.85 \times P_C /100 \times R \times (C_i - C_o) / C_o \text{ , Where,}$$

V_C = Increase or decrease in the cost of the work during the quarter under consideration due to changes in the rates for cement;

C_o = The all India average wholesale price index [9]for cement (Ordinary Portland Cement) for the quarter preceding the date of opening of the tenders as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India , New Delhi;

C_i = The all India average wholesale price index for cement (Ordinary Portland Cement) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_C = Percentage of cement component of the work

---

[5] Employer to specify as per requirement. Exclusions if any should also be specified.

[6] Specify an appropriate figure. For normal works it could be Rs.20 lakhs to cover 4 persons @Rs.5 lakhs each.

[7] The Formula has some normal components. It should be changed if need be to suit the nature of the work.

[8] The Index numbers are available in the web site *http://labourbureau.nic.in/indtab.html*

[9] The index number are available in the web site *http://eaindustry.nic.in*

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

Note: For the application of this clause index of Ordinary Portland Cement[10] has been chosen to represent Cement Group

Adjustment for steel component:

(iii) Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula.

$V_S = 0.85 \times P_S/100 \times R \times (S_i - S_o)/S_o$ where,

V_S = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel;

S_o = The all India average wholesale price index for steel (M.S.Bars and rods) for the quarter preceding the date of opening of Bids as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

S_i = The all India average wholesale price index for steel (M.S. Bars and Rods) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, New Delhi

P_S = Percentage of steel component of the work

Note: For the application of this clause, index of M.S. Bars and Rods[11] has been chosen to represent steel group.

Adjustment of Bitumen Component:

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_B = 0.85 \times P_B/100 \times R \times (B_i - B_o)/B_o \text{ , Where}$$

V_B = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.

B_o = The official retail price of bitumen at the IOC /HPCL/BPL or any other depot at ..... [12]on the day 30 days prior to the date of opening of Bids.

B_i = The official retail price of bitumen at the IOC/HPCL/BPL or any other depot at ..... for the 15th day of the middle calendar month of the quarter under consideration.

P_B = Percentage of bitumen component of the work.

Adjustment of Fuel and Lubricant component:

(v) Price adjustment for increase or decrease in cost of Fuel and Lubricants shall be paid in accordance with the following formula:

$$V_F = 0.85 \times P_F/100 \times R \times (F_i - F_o)/F_o, \text{ Where,}$$

V_F = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for Fuel and Lubricants.

F_o = The official retail price of High Speed Diesel (HSD) at the IOC/HPCL/BPL or other consumer pump at Bangalore on the day 30 days prior to the date of opening of Bids.

F_i = The official retail price of HSD at the IOC/HPCL/BPL or other consumer pump at Bangalore for the 15th day of the middle calendar month of the quarter under consideration.

P_F = Percentage of Fuel and Lubricant component of the work.

---

[10] This may be changed to any other type of cement depending on the nature of work.

[11] This may be changed depending on the major type of steel used depending on the nature of work

[12] Insert the nearest location of POL Depot

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Note: For the application of this Clause the price of HSD[13] has been chosen to represent Fuel and Lubricant Group

Adjustment for Plant and Machinery Spares Component:

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the contractor shall be paid in accordance with the following formula:

$$V_P = 0.85 \times P_P/100 \times R \times (P_i - P_o)/P_o \text{ , Where}$$

V_P = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for plant and machinery spares.

P_o = The all India average wholesale price index for Heavy machinery and parts for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_i = The all India average wholesale price index for Heavy machinery and parts for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_B = Percentage of Plant and Machinery Spares component of the work.

Note: For the application of this Clause index of Heavy Machinery and Parts[14] has been chosen to represent the Plant and Machinery Spares Group.

Adjustment for Other materials.:

(vii) Price adjustment for increase or decrease in the cost of other materials other than cement, steel, bitumen and Fuel and Lubricants[15], procured by the contractor shall be paid in accordance with the following formula:

$$V_M = 0.85 \times P_M/100 \times R \times (M_i - M_o)/M_o \text{ , Where}$$

V_M = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for local materials other than cement, steel, bitumen and Fuel and Lubricants.

M_o = The all India average wholesale price index for all commodities for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

M_i = The all India average wholesale price index for all commodities for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_M = Percentage of other material component (Other than cement, steel, bitumen and Fuel and Lubricants) of the work.

The following percentages [16]will govern the price adjustment for the entire contract:[17]

1. Labour – P_L ..... %
2. Cement – P_C ..... %
3. Steel – P_S ..... %
4. Bitumen – P_B ..... %
5. Fuel and Lubricants – P_F[18] ..... %
6. Plant and Machinery Spares – P_P[19] ..... %

[13] This could be appropriately changed to any other item depending on the nature of work.
[14] This could be appropriately changed to any other item depending on the nature of the work.
[15] Add, delete or change depending on the nature of work.
[16] The percentages have to be approximately worked out on the estimates of cost and incorporated in the tender document before issue. It shall not be changed even if there is change of scope of work during execution.
[17] The components could be added or deleted or changed depending on the nature of the work.
[18] This could vary from 5% for normal works and 10% for highly mechanized operations in the work

CONTRACTOR
EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

7 Other materials – P_M .....%

TOTAL 100 %[20]

[40]

The liquidated damages for the whole of the works are **Rs.19,000/-**(amount) per day[21] and that for the milestones are as under:

For Milestone 1: Rs **6,350/- per day** [41]
For Milestone 2: Rs **12,700/-per day**
For Milestone 3: Rs **19,000/-Per day**

The maximum amount of liquidated damages for the whole of the works is Ten percent of final contract price. [41]

The amounts of the advance payment are: **[42]**

Nature of Advance	Amount (Rs.)	Conditions to be fulfilled
1. Mobilization	**5% of the Contract price**	**On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period)**

(The advance payment will be paid to the Contractor no later than 30 days after fulfillment of the above conditions).

Repayment of advance payment for mobilization : **[42]**

The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or Three [22] months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 7.5% percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.

[23]The date by which "as-built"[24] **drawings (in scale 1:1000**[25]) in 2 sets are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]

[26]The date by which Operating and Maintenance Manuals are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be.

---

[19] This could vary from 15% for normal works to 30% for highly mechanized operations in the work
[20] The total of the percentages for the various components of the works should be 100.
[21] The amount is usually computed on the basis of 0.1% of the contract price per day. The amount has to be specified as a round figure nearest to the hundred.
[22] To be filled up by the Employer before issue of the tender document; say 'Three or four months'
[23] Score out whichever is not applicable.
[24] Completion drawings
[25] Specify an appropriate scale
[26] Score out which ever is not applicable.

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

(The amount should be sufficient to get the completion drawings or Operating and
Maintenance Manuals prepared by alternative agency in case the contractor fails to submit.)
[48]

The following events shall also be fundamental breach of the contract: [49.2]

1. The contractor has contravened Sub-clause 7.1 and Clause 9 of CC.

The percentage to apply to the value of the work not completed representing the Employer's Additional cost for completing the Works shall be 30 percent (30%) . [50.1]

(Change if need be. It should be sufficient to get the balance of works completed by alternative agency.)

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

SECTION 7: SPECIFICATIONS

As per specifications mentioned in BOQ

SECTION 8: DRAWINGS
(Enclosed)

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

SECTION 9: BILL OF QUANTITIES

Sl No	Description of Item	Unit	Quantity	Rate, Rs		Amount In Figures
				In Figures	In Words	
1	Removing and refixing stone slabs of drains and pointing in CM (1:3) including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	288.00	111.30	Rupees One Hundred Eleven And Paise Thirty Only	32054.40
2	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	430.90	214.50	Rupees Two Hundred Fourteen And Paise Fifty Only	92428.74
3	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 6.00 km and complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	2443.38	57.02	Rupees Fifty Seven And Paise Two Only	139321.53
4	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	36.85	5421.90	Rupees Five Thousand Four Hundred Twenty One And Paise Ninety Only	199797.02

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

CONTRACTOR

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

5	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 10cm including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	78.78	7273.72	Rupees Seven Thousand Two Hundred Seventy Three And Paise Seventy Two Only	573052.76
6	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Tn	3.94	72326.98	Rupees Seventy Two Thousand Three Hundred Twenty Six And Paise Ninety Eight Only	284910.44
7	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	50.40	4871.76	Rupees Four Thousand Eight Hundred Seventy One And Paise Seventy Six Only	245536.70
8	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications. including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	25.20	5599.98	Rupees Five Thousand Five Hundred Ninety Nine And Paise Ninety Eight Only	141119.50
9	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc,	Sqm	33.00	3640.00	Rupees Three Thousand Six Hundre	120120.00

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

	complete and as per drawing and the directions of Engineer in-charge including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge				d Forty Only	
10	Providing and laying 100mm thick pre-cast cover slabs over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	m	938.00	1145.86	Rupees One Thousand One Hundred Forty Five And Paise Eighty Six Only	1074816.68
11	KSRB 14.6 : Providing and laying heavy duty cobble stones interlock pavers, 60mm thick using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	3105.00	1176.60	Rupees One Thousand One Hundred Seventy Six And Paise Sixty Only	3653343.00
12	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Nos	2220.00	432.48	Rupees Four Hundred Thirty Two And Paise Forty Eight Only	960105.60
13	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	333.00	84.80	Rupees Eighty Four And Paise Eighty Only	28238.40
14	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method by rotavator at OMC,spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	500.07	1855.00	Rupees One Thousand Eight Hundred Fifty Five Only	927629.85
15	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site,	Cum	1187.11	2001.28	Rupees Two Thousand One And	2375729.49

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

	laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge				Paise Twenty Eight Only	
16	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	8333.50	29.68	Rupees Twenty Nine And Paise Sixty Eight Only	247338.28
17	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	5273.50	5.30	Rupees Five And Paise Thirty Only	27949.55
18	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Sqm	8333.50	12.72	Rupees Twelve And Paise Seventy Two Only	106002.12
19	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	416.68	6858.20	Rupees Six Thousand Eight Hundred Fifty Eight And Paise Twenty Only	2857640.49
20	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Cum	321.84	8049.64	Rupees Eight Thousand Forty Nine And Paise Sixty Four Only	2590696.14
21	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface:	Sqm	284.75	454.74	Rupees Four Hundre	129487.22

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV

	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge				d Fifty Four And Paise Seventy Four Only	
22	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer including all lead and lead including loading and unloading and specifications as per the direction of engineer in charge	Nos	240.00	357.22	Rupees Three Hundre d Fifty Seven And Paise Twenty Two Only	85732.80
				Total Amount in Rupees		**16893147.54**
				4% KRIDL Charges		**675722.81**
				Sub Total		**17568773.50**
				12% GST		**2108255.17**
				Total		**19677125.52**

Note:

(1) Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 11.2 and CC Clause 37.2).

(2) Unit rates and prices shall be quoted by the Tenderer in Indian Rupees.

(3) Where there is a discrepancy between the rate in figures and words, the lower of the two will govern. [ITT Clause 24.1(a)]

(4) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITT Clause 24.1 (b)]

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

EXECUTIVE ENGINEER
RI-YELAHANKA DIV